



LABORATORY
OF THE
INLAND REVENUE DEPARTMENT

OTTAWA, CANADA

BULLETIN No. 398

CHEESE



NOTES AND COMMENTS.

Under this heading, as occasion arises, the Bulletins issued by this Department will contain, as an appendix, such comment as may seem necessary or advisable upon matters relating to the work of the Department in connection with the administration of the Adulteration Act, the Fertilizers Act, the Feeding Stuffs Act or the Proprietary Medicines Act.

It frequently happens that correspondents ask information regarding the above Acts, of such a nature that the matter in question possesses general interest, and comment upon it would prove acceptable and useful to others than the immediate questioner. In such cases the reply may find a place in these columns. For convenience of reference these notes will be numbered in series.

A. MCGILL,
Chief Analyst.

LABORATORY

OF THE

INLAND REVENUE DEPARTMENT

OTTAWA, CANADA

BULLETIN No. 398

CHEESE

OTTAWA, April 24, 1918.

J. U. VINCENT, Esq., K.C., B.A., L.Ph.,
Deputy Minister of Inland Revenue,

SIR,—I beg to hand you a report, covering 172 samples of Cheese, purchased in October, November and December, 1917.

With a single exception (No. 76235, sold as skim-milk cheese) these samples were purchased as *Cheese*, which is thus defined by Order in Council of November, 1910 (published as circular G. 934): "Cheese is the sound, solid and ripened product made from milk or cream by coagulating the casein thereof with rennet or lactic acid, with or without the addition of ripening ferments and seasoning, and contains, in the water-free substance, not less than forty-five (45) per cent of milk fat. Cheese may also contain added colouring matter of harmless character."

In 166 samples analyzed (5 samples were lost in the disaster at Halifax, and one by breakage in transit) the following results were obtained:—

Samples containing over 60 per cent fat.	2
" " from 55 to 60 per cent fat.	27
" " from 50 to 55 per cent fat.	91
" " from 45 to 50 per cent fat.	39
" " less than 45 per cent fat.	6
" skim-milk cheese.	1

166

Of six samples showing less than 45 per cent of fat, five samples contain above 44 per cent, and as falling within 1 per cent of the limit, I have recommended that these be permitted to pass. The actual findings for fat are 44.33, 44.45, 44.95, 44.78, and 44.39.

One sample (No. 68547) contains only 40.26 per cent fat, and must be judged adulterated.

A sample of skim-milk cheese (No. 76235) contains 39.14 per cent fat.

None of these samples contain any other fats than milk fat; and in this respect they fulfil requirements of the standard.

The standard for fat in cheese, as defined in Circular No. 19, U.S.A., Department of Agriculture, dated 26th June, 1906, is 50 per cent, calculated upon the dry substance; as against 45 per cent required by Canadian Standards. The present report shows that 120 samples out of 165, or 73 per cent of the collection, contain above 50 per cent fat; and it is open to question whether the legal standard for fat in cheese might not, advantageously, be raised. In 1909 (Bull. 171) I suggested the adoption of 48 per cent.

Our last systematic inspection of Cheese was made in 1912 and is published in Bulletin No. 247. Of 141 samples examined, only 43 were found to contain above 50 per cent of fat; and the results herein furnished appear to justify the inference that Canadian Cheese has improved in quality, so far as fat content is concerned, within the last six years.

Advantage was taken, in 1912, of the opportunity to study the normal moisture content of Cheese; and the results indicated a mean of 30.90 per cent for 141 samples. Earlier results had indicated about 30 per cent.

The average percentage of moisture for 165 samples in the collection now reported is 33.68. These samples were all furnished to the analyst in moisture-proof containers, so that the water content reported is that for Cheese as sold.

I am not aware that any legal limit for moisture in Cheese has been suggested earlier than my own of 1909 (see Bull. No. 171), when I proposed 30 per cent as reasonable. It is possible that later experience might justify the adoption of 35 per cent as a maximum limit for moisture in ripened cheese. This limit was suggested by me in 1913 (Bull. 247) based upon work then reported. Canadian Hard Cheese is essentially of the Cheddar type; and for this type of Cheese, at five months old, Van Slyke (Bull. 146, Bureau of Animal Industry, U.S. Dept. of Agriculture, 1911) reports moisture as below:—

Maximum.	38.10
Minimum.	29.85
Mean.	34.01

For English Cheddar, Voelcker reports (quoted by Allen, Vol. VIII, p. 251):—

Maximum.	39.43	water.
Minimum.	30.32	"
Mean.	35.16	"

I beg to recommend publication of this report as Bulletin No. 398.

I have the honour to be, sir,
Your obedient servant,

A. MCGILL,
Chief Analyst.

BULLETIN No. 398—

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.	
				Quantity.	Cost.	Manufacturer.	Furnisher.

DISTRICT OF NEW BRUNSWICK—

1917.							
Nov. 22	Cheese...	78226	M. E. Grass, St. John, N.B.	3 lbs.	60	.....	Gunns, Ltd., St. John, N.B.
" 26	" ..	78227	W. A. Porter, St. John, N.B.	2 "	60	.....	Warren, Mason, St. John, N.B.
" 26	" ..	78228	Steeves Bros., St. John, N.B.	2 "	60	.....	Swift Co., Toronto, Ont.
" 27	" ..	78229	Peter McIntyre, St. John, N.B.	2 "	54	Hamstead Cheese Factory, Hamstead, N.B.	.....
" 30	" ..	78230	McPherson Bros., St. John, N.B.	2 "	70	.....	Geo. E. Barbour Co., Ltd., St. John, N.B.
" 30	" ..	78231	J. P. Barrett, St. John, N.B.	2 "	70	.....	Gunns, Ltd., St. John, N.B.
Dec. 6	" ..	78232	H. C. Jewett, Fredericton, N.B.	2 "	56	.....	H. W. Cole, Ltd., St. John, N.B.
" 11	" ..	78233	Smith Bros., Sussex, N.B.	2½ "	75	J. Northrup, Berwick, N.B.	.....
" 12	" ..	78234	H. T. Brewster, Moncton, N.B.	2 "	60	.....	Reed Co., Ltd., Moncton, N.B.
" 13	" ..	78235	Mrs. P. White, Moncton, N.B.	2 "	60	.....	F. W. Fearman & Co., Hamilton,

DISTRICT OF QUEBEC CITY—

Oct. 31	Fromage, Can.	70779	J. A. Vezina, 62 rue Arago, Quebec.	2 lbs.	56	Unknown	Emond & Côté....
Nov. 2	" ..	70780	O. P. Brousseau, 218 rue Arago, Quebec.	2 "	75	"	G. Beauchamp....
" 2	" ..	70781	H. Blouin, 284 rue Arago, Quebec.	2 "	62	Laiterie Laval....	Mfrs.
" 2	" ..	70782	A. Pichette, 323 rue Arago, Quebec.	2 "	62	Unknown	Emond & Côté....
" 5	" ..	70783	J. B. Routier, 1023 St. Valier, Quebec.	2 "	60	"	"
" 5	" ..	70784	P. E. Kirouac, 1105 St. Valier, Quebec.	2 "	55	"	Drouin & frère....
" 5	" ..	70785	F. Langlois, 1175 St. Valier, Quebec.	2 "	60	"	Emond & Côté....
" 5	" ..	70786	A. Faucher, 49 St. Bernard, Quebec.	2 "	64	"	"
" 6	" ..	70787	Art. Drole, 712 St. Valier, Quebec.	2 "	89	"	J. B. Renaud & Cie.
" 6	" ..	70788	J. H. Turcotte, 92 Caron, Quebec.	2 "	60	"	Emond & Côté....

CHEESE.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.						No. Sample.	Remarks and Opinion of the Chief Analyst.
	Water.	Fat.	Total Ash.	Salt in Ash.	Card by Difference.	Fat on dry Substance.		

JOHN C. FERGUSON, INSPECTOR.

	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.		
.....	32.16	37.50	3.31	1.02	27.08	55.28	78226	Genuine.
.....	35.38	34.90	3.46	1.11	26.20	54.02	78227	"
.....	32.24	37.85	3.31	1.00	26.00	55.86	78228	"
.....	33.21	35.86	3.54	1.07	27.40	53.68	78229	"
.....	34.70	35.10	3.18	0.89	27.02	53.75	78230	"
	*						78231	
							78232	
							78233	
							78234	
							78235	

F. X. W. E. BELAND, INSPECTOR.

.....	34.08	35.15	3.41	0.94	27.36	53.32	7077	Genuine.
.....	32.15	35.10	3.57	1.00	29.18	51.73	70780	"
.....	30.86	30.65	4.36	1.55	34.13	44.33	70781	Slightly below stand- ard. Pass.
.....	35.30	34.75	3.55	1.08	26.40	53.82	70782	Genuine.
.....	33.03	36.45	3.65	0.90	26.87	54.43	70783	"
.....	33.07	35.80	3.60	1.21	27.53	53.49	70784	"
.....	28.15	37.00	4.06	1.25	30.79	51.50	70785	"
.....	35.51	35.65	3.22	0.65	25.62	55.28	70786	"
.....	30.04	37.15	3.16	0.87	29.65	53.10	70787	"
.....	32.01	36.25	4.06	1.46	27.68	53.32	70788	"

* Lost, due to injury to laboratories in Halifax explosion.

BULLETIN No. 398

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.	
				Quantity.	Cents.	Manufacturer.	Furnisher.

DISTRICT OF QUEBEC PROVINCE—

1917.							
Oct. 27	Fromage...	5686	Alexandre Villeneuve, St. Jerome.	2 lbs.	60	.....	Gunn, Langlois...
Nov. 6	" ..	5506	A. Delorme, Ste. Therese de Blainville.	2 "	65	.....	" " ..
" 6	" ..	5507	J. B. Lefevre, Ste. Therese de Bainville.	2 "	70	.....	" " ..
" 6	" ..	5510	Wadell & Frere, Ste. Therese de Bainville.	2 "	55	.....	" " ..
" 20	" ..	5518	Nap. Hetu, Ste. Agathe des Mont.	2 "	85	.....	" " ..
" 20	" ..	5519	R. Touchette, Ste. Agathe des Mont.	2 "	60	.....	" " ..
Oct. 22	" ..	7765	Joseph Rioux, Trois Pistoles	2 "	59	.....

DISTRICT OF THREE RIVERS—

Oct. 22	Cheese....	7571	G. H. Read, St. Felix de Valois.	2 lbs.	54	.....	Chaput & Sons, Montreal.
" 25	" ..	7576	A. A. Boucher, Joliette....	2 "	55	.....	Gunn, Langlois, Montreal.
" 25	" ..	758.	Alex. Dufresne, Joliette....	2 "	50	Jos. Latendresse, St. Beatrix.	.....
" 26	" ..	7585	J. H. R. Deblois, St. Thomas de Joliette.	2 "	54	Jos. Latendresse, St. Alphonse.	.....
" 27	" ..	7588	Chas. Peltier, St. Gabriel Brandon.	2 "	55	.....	Gunn, Langlois, Montreal.
" 31	" ..	7597	Jonachim Robert, St. Gabriel	2 "	40	Davies Co., Ltd., Montreal.	.....
31	" ..	7598	Wm. Pichette, St. Gabriel	2 "	57	Oliver Turcotte, St. Edmond.	.....
Nov. 5	Fromage.	7600	Geo. Sylvester, Joliette....	2 "	64	Jos. Latendresse, St. Beatrix.	.....
" 5	" ..	8001	A. L. Caisse, Berthierville	2 "	60	Alph. Robillard, St. Cuthbert.	.....
" 5	" ..	8003	O. Paquette, Berthierville	3 pks.	1.05	McLarens	.....

DISTRICT OF MONTREAL—

Oct. 29	Cheese ...	78971	E. Lanone, 197 Vitre St., E., Montreal.	1½ lbs.	60	.....
" 22	" ..	78972	A. Landry, St. Lawrence Market, Montreal.	1½ "	42	.....
" 29	" ..	78973	P. Allard, 224 Lagachetiere E., Montreal.	1½ "	50	.....
Nov. 2	" ..	78974	A. Mireault, 110 Mount Royal Ave., E., Montreal.	1½ "	47	.....	Z. Limoges...

CHEESE.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.						No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Water	Fat.	Total Ash.	Salt in Ash.	Curd by Difference.	Fat on dry Substance		

N. CADIEUX AND J. H. RIOUX, TEMPORARY INSPECTORS.

	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.		
.....	36.00	32.10	3.08	0.58	28.82	50.01	5686	Genuine.
.....	35.72	32.55	3.00	0.82	28.73	50.64	5506	"
.....	32.24	32.75	3.38	1.02	31.61	48.33	5507	"
.....	35.64	38.20	3.28	0.98	22.88	59.35	5510	"
.....	30.34	35.10	3.42	0.98	31.14	50.39	5518	"
.....	35.30	34.50	3.20	0.73	27.00	53.32	5519	"
.....	29.62	32.05	3.94	0.91	34.39	45.52	7765	"

DR. V. P. LAVALLEE, INSPECTOR.

.....	34.20	35.65	3.20	0.98	26.95	54.17	7571	Genuine.
.....	34.74	34.50	3.92	1.02	26.84	52.71	7376	"
.....	40.68	31.20	3.82	1.05	24.30	52.59	7582	"
.....	34.54	37.85	3.12	0.76	24.49	57.82	7585	"
.....	33.02	34.70	3.96	0.91	29.32	51.80	7586	"
.....	28.60	38.20	3.72	0.94	29.48	53.50	7597	"
.....	28.92	40.00	3.34	1.05	27.74	56.27	7598	"
.....	35.58	37.25	3.78	0.94	23.39	57.82	7600	"
Imperial Cheese...			Broken in transit				8061	"
Imperial Cheese...	30.16	35.50	3.56	1.04	30.78	50.83	8043	"

J. J. COSTIGAN, INSPECTOR.

.....	40.44	29.25	3.62	0.92	26.69	49.11	78971	Genuine.
.....	40.40	32.05	2.86	0.90	24.69	53.60	78972	"
.....	40.52	27.70	3.60	1.02	28.16	46.55	78973	"
.....	38.52	34.20	3.46	1.07	23.82	55.62	78974	"

BULLETIN No. 398—

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.	
				Quantity	Gents.	Manufacturer.	Furnisher.

DISTRICT OF MONTREAL—

1917.							
Nov. 2	Cheese ...	78975	D. Fournier, 340 Mount Royal Ave. E., Montreal	1½ lb.	45	.....	J. A. Vaillancourt
" 2	"	78976	Bastian Grocery, 704 Mt. Royal Ave. E., Montreal.	2 "	60	.....	Gunn Langlois Co.
" 2	"	78977	Grenon Frères, 680 Papineau Ave., Montreal.	1½ "	45	.....	J. A. Vaillancourt
" 2	"	78978	St. Urbain Grocery 80 St. Urbain St., Montreal.	2 "	64	.....	Swift Canadian Co.
" 2	"	78979	L. Goodman, 11 Lagache- tiere St. W., Montreal.	1½ "	62	.....	W. Champagne...
" 2	"	78980	S. Burkhardt, 100 St. Cath- erine St. W., Montreal.	1½ "	53	.....	.....

DISTRICT OF VALLEYFIELD—

Nov. 13	Cheese ...	79331	Hubbard & Bell, Cowans- ville.	2 lb.	60	.....	.....
" 15	"	79332	D. H. Connor, Bedford.	2 "	54	M. A. Darbe West Brome, P.Q.	.....
" 15	"	79333	A. Nadeau,	1½ "	42	.....	.....
" 16	"	79334	L. H. Lamarre, Longueuil.	1½ "	53	.....	.....
" 16	"	79335	J. L. Lamarre,	2 "	68	.....	.....
" 22	"	79336	McCallum & Lahaie, Buck- ington,	1½ "	42	.....	.....
" 22	"	79337	Wm. O'Neil, Buckingham.	2 "	60	.....	.....
" 22	"	79338	R. J. Cameron,	3 "	56	.....	.....
" 29	"	79339	Z. Perron, Valleyfield ...	2 "	67	.....	.....
" 29	"	79340	Co-operative Society, Valley- field.	1½ "	60	.....	.....

DISTRICT OF OTTAWA—

Oct 26	Cheese ...	80447	Stone & Fisher, Iroquois.	2½ lb.	58	Sharken, Iroquois.	.....
" 26	"	90452	F. F. Adams, Cardinal.	2 "	56	Currie & Scott	.....
Nov. 3	"	80470	E. B. Leacy, Pembroke.	2 "	59	R.R. 3 Prescott.	.....
" 6	"	80481	P. J. Glavey, 33 York St. Ottawa.	2 "	54	Swift Can. Co., Ottawa.	L. Chapt. file Montreal.
" 8	"	80483	H. Richardson, 1097 Wellington St., Ottawa.	2½ "	70	Whyte Pack. Co., Brockville.	.....

CHEESE.

Inspector's Report. (Is not an expression of opinion)	Results of Analysis.						No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Water.	Fat.	Total Ash.	Salt in Ash.	Curd by dif- ference.	Fat on dry substance.		

Concluded.

.....	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	78975	Genuine.
.....	30.12	36.70	3.44	0.89	29.74	52.52	78976	"
.....	39.18	27.85	3.58	1.10	29.39	45.78	78976	"
.....	34.72	33.30	3.60	1.04	28.38	57.01	78977	"
.....	42.04	29.00	3.80	1.09	25.16	50.03	78978	"
.....	43.08	31.25	3.42	1.09	22.25	54.02	78979	"
.....	43.18	32.00	3.06	0.81	21.76	56.31	78980	"

J. J. COSTIGAN, ACTING INSPECTOR.

.....	35.02	34.00	3.62	0.89	27.36	52.32	79331	Genuine.
.....	31.48	43.10	3.66	0.84	21.76	62.90	79332	" Extra rich
.....	30.22	34.35	3.24	0.62	26.19	53.77	79333	Cheese. Genuine.
.....	32.58	34.60	3.80	0.94	29.02	51.31	79334	"
.....	33.20	34.45	3.24	0.86	29.11	51.57	79335	"
.....	35.22	38.30	3.66	0.94	22.82	59.03	79336	"
.....	38.54	34.20	3.64	0.95	23.62	55.64	79337	"
.....	33.90	34.60	3.42	0.80	28.08	52.34	79338	"
.....	32.78	35.10	3.38	0.97	28.74	52.21	79339	"
.....	27.76	38.25	3.48	1.00	30.51	58.96	79340	"

J. A. RICKEY, INSPECTOR.

.....	36.80	34.00	3.98	1.05	26.28	52.77	80447	Genuine.
.....	35.88	28.50	2.96	0.56	32.66	44.45	80452	Slightly below standard.
.....	34.50	34.35	3.88	1.05	27.27	52.44	80470	Paste. Genuine.
.....	26.18	33.00	3.38	0.65	35.44	45.98	80481	"
.....	36.50	32.60	3.54	0.95	28.36	49.77	80483	"

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.	
				Quantity.	Grats.	Manufacturer.	Furnisher.

DISTRICT OF OTTAWA—

1917.							
Nov. 9	Cheese ...	80486	J. Christie, Winchester, ...	2 lbs.	58	Harris Abattoir, Toronto,	
" 9	" ...	80489	L. Flora "	2½ "	70	J. Campbell	
" 12	" ...	80492	Bryson-Graham, Ltd., Ottawa.	2½ "	85	Finch Creamery, Finch, Ont.	
" 19	" ...	80501	T. Bowman, 785 Somerset St., Ottawa.	1½ "	53		Freedman, Ottawa
" 20	" ...	80508	King George Grocery, 2742 Bank St., Ottawa.	2 "	60	Swift-Canadian Co., Ottawa.	

DISTRICT OF KINGSTON—

Nov.	2	Cheese ...	81926	R. W. Marshall, Kingston.	2 lbs.	62		J. Y. Parkhill, Kingston.
"	2	" ...	81927	J. M. Gordon, Kingston.	2 "	55		" "
"	2	" ...	81928	J. R. B. Gage, Kingston.	2 "	60		A. Maclean, Kingston.
"	2	" ...	81929	E. H. Baker, Kingston.	2 "	55		J. Y. Parkhill, Kingston.
"	5	" ...	81930	Caverly & Bradshaw, Kingston.	2 "	60	Bradshaw Factory, Harrowsmith.	
"	5	" ...	81931	S. J. Watts, Kingston.	2 "	60		J. Y. Parkhill, Kingston.
"	5	" ...	81932	A. Glover, Kingston.	2 "	50	Hogan Factory, Argian.	
"	5	" ...	81933	Wm. Davies, Kingston.	2 "	44	Gibson Cold Spring Factory.	
"	5	" ...	81934	J. E. Evans & Son, Kingston.	2 "	60		J. Y. Parkhill, Kingston.
"	5	" ...	81935	E. Hopkinson, Kingston.	2 "	60	L. W. Murphy, Kingston.	

DISTRICT OF TORONTO—

Nov.	6	Cheese ...	81011	J. C. Macivor, 380 College St., Toronto.	2 lbs.	60		Matthews, Blackwell, Co., Ltd., Toronto.
"	6	" ...	81012	M. E. Bush, 304 College St., Toronto.	2 "	70		Marshall's, Ltd., Toronto.
"	7	" ...	81013	The Wm. Davies, Ltd., 562 Queen St. W., Toronto.	2 "	58		
"	8	" ...	81014	Chas. Meeh, 487 Parliament St., Toronto.	2 "	67	McLaren's Imperial Cheese Co., Ltd., Toronto.	
"	8	" ...	81015	W. H. Thompson, 4742 Bloor St. W., Toronto.	2 "	65		Swift-Can. Co., Ltd., West Toronto.
"	9	" ...	81016	F. T. Higgins, 808 Queen St. W., Toronto.	2 "	68	McLaren's Imperial Cheese Co., Ltd., Toronto.	

CHEESE

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.							Remarks and Opinion of the Chief Analyst.
	Water.	Fat.	Total Ash.	Salt in Ash.	Curd by dif- ference.	Fat on dry substance.	No. of Sample.	
<i>Concluded.</i>								
	p.e.	p.e.	p.e.	p.e.	p.e.	p. e.		
.....	33.32	32.45	3.82	0.91	30.61	49.96	80486	Genuine.
.....	36.62	30.20	3.04	0.68	30.16	47.68	80489	"
Canadian Stilton....	26.10	34.60	3.36	0.52	35.94	46.82	80492	"
.....	39.60	32.35	2.60	0.70	31.45	46.60	80501	"
.....	36.96	34.50	3.52	1.05	25.02	53.86	80506	"

JAMES HOGAN, INSPECTOR.

.....	40.92	30.20	3.10	0.98	25.78	51.10	81926	Genuine.
.....	35.86	29.25	3.44	0.77	31.45	45.60	81927	"
.....	33.84	37.75	3.86	0.92	24.55	57.50	81928	"
.....	31.40	33.05	3.49	0.96	32.07	48.17	81929	"
.....	36.70	31.70	3.32	0.58	28.28	50.07	81930	"
.....	35.24	35.25	3.62	1.03	25.89	54.41	81931	"
.....	36.70	31.90	3.34	0.76	28.06	50.31	81932	"
.....	42.54	32.90	3.28	0.87	21.28	57.25	81933	"
.....	33.76	34.35	2.82	0.70	29.07	51.85	81934	"
.....	30.64	31.15	3.20	0.94	26.01	50.11	81935	"

H. J. DAGER, INSPECTOR.

.....	36.28	29.90	3.58	0.80	30.24	46.94	81011	Genuine.
.....	37.72	33.30	3.34	0.97	25.64	60.57	81012	Extra rich cheese.
.....	37.04	30.10	3.62	1.06	29.24	47.80	81013	Genuine.
.....	33.22	34.25	3.42	0.79	29.11	51.21	81014	"
.....	32.64	34.10	3.10	1.11	30.16	50.62	81015	"
.....	32.30	35.80	3.16	0.93	28.74	52.88	81016	"

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor	Cost.		Name and Address of Manufacturer or Furnisher, as given by the Vendor.	
				Quantity.	Cost.	Manufacturer.	Furnisher.

DISTRICT OF TORONTO—

1917.							
Nov. 9	Cheese ...	81017	H. Wainwright, 2563 Dundas St. W., Toronto.	2 lb.	52	.....	Swift's Can. Co., Ltd., W. Toronto
" 9 "	" ...	81018	Williams & Son, 827 Lansdowne Ave., Toronto.	2 "	60	.....	Gunn's, Ltd., Toronto.
" 12 "	" ...	81019	S. Bone, 195 Avenue Rd., Toronto.	2 "	65	McLaren's Imperial Cheese Co., Ltd., Toronto.	.....
" 12 "	" ...	81020	Geo. Ratcliffe, 864 Yonge St., Toronto.	2 "	55	" "	.....

DISTRICT OF HAMILTON—

Oct. 23	Cheese ...	80950	Dawson & Co., Brampton	2 lb.	60	.....	The Wm. Davies Co., Ltd., Toronto
" 23 "	" ...	80951	C. T. Hicks, Guelph	2 "	60	.....	Simpson & Co., Guelph.
" 24 "	" ...	80952	Thomas & Son, Guelph	2 "	58	.....	Matthews - Blackwell Co., Ltd., Brantford.
" 24 "	" ...	80953	Dunk & Co., Kitchener, Ont.	2 "	63	.....	Ingersoll Pack Co., Ingersoll.
" 25 "	" ...	80954	J. H. Ziegler, Waterloo, Ont.	2 "	62	.....	The Harris Abattoir Co., Ltd., Toronto.
" 25 "	" ...	80955	A. W. Dietrich, Waterloo, Ont.	2 "	57	.....	John Garvey, London.
" 26 "	" ...	80956	J. H. Laird, Galt	2 "	58	East Zorra & Blandford Factory, Inverkip, Ont.	.....
" 26 "	" ...	80957	F. J. Matthews, Brantford	2 "	64	.....	Geo. Foster & Son, Brantford.
" 30 "	" ...	80958	Wm. Carroll Grocery, 1086 Barton St. E., Hamilton.	2 "	56	.....	.....
" 30 "	" ...	80959	J. S. Walsh, 244 Lock St. S., Hamilton.	2 "	56	.....	John Duff & Son, Hamilton.

DISTRICT OF WINDSOR—

Nov. 5	Cheese ...	65327	C. A. Filby, Aylmer, Ont.	1½ lb.	58	Sevele Cheese Factory, near Aylmer, Ont.	.....
" 6 "	" ...	65334	Stratton & Martin, Aylmer, Ont.	1½ "	40	Wm. Boyce, Lyons, Ont.	.....
" 6 "	" ...	65336	G. O. Werrett, Simcoe	1½ "	48	Tyrrell Cheese Co., near Simcoe.	.....
" 7 "	" ...	65340	Harry C. Marlatt, Simcoe	1½ "	45	.....	J. Duff & Sons, Hamilton.
" 8 "	" ...	65348	Edgar Hicks, Tillsonburg	1½ "	40	Miller Cheese Co., Miller's Corners, Ont.	.....
" 13 "	" ...	65360	N. B. Howden, Watford	1½ "	38	Lambton Creamery Benson.	.....
" 13 "	" ...	65362	P. Dodds & Son, Watford	1½ "	45	Arcona Creamery	.....

CHEESE.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.						No. of Sample.	Remarks and Opinion. of the Chief Analyst.
	Water.	Fat.	Total Ash.	Salt in ash.	Curd by difference.	Fat on dry substance.		

Concluded.

.....	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	81017	Genuine.
.....	32.10	35.10	3.80	1.05	29.20	52.35		
.....	34.96	30.60	3.78	0.90	30.66	47.04	81018	"
.....	30.76	33.50	3.31	0.98	32.40	45.38	81019	"
.....	31.16	34.45	3.26	0.96	31.18	50.04	81020	"

H. J. DAGER, ACTING INSPECTOR.

.....	29.56	33.60	4.02	1.05	32.82	47.70	80950	Genuine.
.....	33.48	31.80	3.98	0.94	30.67	47.80	80951	"
.....	29.82	34.50	3.38	1.00	32.30	49.15	80952	"
.....	34.40	32.60	3.30	0.98	29.70	49.60	80953	"
.....	26.26	38.70	3.64	1.04	31.40	51.77	80954	"
.....	35.22	29.60	3.80	0.94	31.33	48.64	80955	"
.....	37.42	23.30	3.80	0.96	30.48	45.22	80956	"
.....	35.82	31.03	3.82	0.92	29.31	48.07	80957	"
.....	37.60	28.80	3.42	0.78	30.18	46.16	80958	"
.....	33.24	32.50	3.64	0.74	30.62	48.66	80959	"

JOHN TALBOT, INSPECTOR.

.....	34.40	32.75	2.84	0.62	30.01	49.92	65327	Genuine.
.....	31.64	32.85	3.54	0.72	31.97	49.06	65334	"
.....	33.42	36.90	3.52	0.97	26.16	55.42	65336	"
.....	29.06	39.50	3.23	0.79	28.22	55.68	65340	"
.....	33.02	30.45	3.02	0.48	33.51	46.74	65348	"
.....	34.56	35.85	3.20	0.91	26.29	54.78	65360	"
.....	32.40	34.95	3.22	0.78	29.48	51.70	65362	"

Date of Collection.	Nature of Sample.	No. of Sample	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher, as given by the Vendor.	
				Quantity.	Cents.	Manufacturer.	Furnisher.

DISTRICT OF WINDSOR—

1917.							
Nov. 13	Cheese...	65364	Rogers & Jackson, Watford	1½ lbs.	42	Lambton Creamery, Petrolia	.....
" 14	" ...	65370	C. R. Polley, Petrolia	2 "	45	.....	Masuret & Co., London, Ont.
" 14	" ...	65372	Fred Scansbrook, Petrolia	2 "	45	.....	T. Kenny & Co., Sarnia.

DISTRICT OF NORTHERN ONTARIO—

Nov. 8	Cheese...	78679	F. C. Preston Co., Haileybury.	2 lbs.	60	Ingersoll Packing Co.	.....
" 12	" ...	78685	Grills Co., New Liskeard.	2 "	60	.....	.....
" 12	" ...	78690	Binkley Co., New Liskeard.	2 "	58	Labontie Pearsons, Ont.	.....
" 13	" ...	78693	John H. Lang, New Liskeard.	37 ozs.	70	Gunn's Ltd., Toronto.	.....
" 13	" ...	78695	Nathaniel Wickett, New Liskeard.	2 lbs.	60	Harris Abattoir, Toronto.	.....
" 15	" ...	78697	Elkins & Sinclair, Haileybury.	2 "	60	.....	Harris Abattoir, Toronto.
" 19	" ...	79404	A. Zion, Cobalt.	2 "	60	Unknown.	.....
" 22	" ...	79406	H. W. Leeman, Cobalt.	2 "	60	.....	Wm. Davies Ltd., Toronto.
Dec. 5	" ...	79408	P. D. Boyer, Haileybury...	2 "	60	.....	L. Valiquette Fabre, Que.

DISTRICT OF MANITOBA—

Nov. 7	Cheese...	79646	John Yellow Lees, Ninette, Man.	2 lbs.	75	.....	Merchants Consolidated, Winnipeg
" 14	" ...	79647	David Gerourd, Somerset, Man.	2 "	60	.....	St. Pierre Cheese Co., St. Pierre, Man.
" 14	" ...	79648	Alex. Perrault, Somerset, Man.	2 "	75	Hudson's Bay Co., Winnipeg.	.....
" 15	" ...	79649	P. J. Halleman, Swan Lake, Man.	2 "	65	.....	Campbell Bros. & Wilson, Winnipeg.
" 15	" ...	79650	O. Vanhouse, Swan Lake, Man.	2 "	65	.....	McDonald & Chapman, Winnipeg.
" 22	" ...	79651	Manitoba Stores Ltd., 346 Cumberland Ave., Winnipeg.	2 "	60	.....	Matthews, Blackwell Co. Ltd., Winnipeg.
" 27	" ...	79652	Robinson & Co., Main St., Winnipeg.	2 "	90	McLaren & Co., Woodstock, Ont.	.....
Dec. 4	" ...	79653	S. Goddard, 128 Pine St., Winnipeg.	2 "	70	Swift Can. Co., Winnipeg.	.....
" 5	" ...	79654	Hudson's Bay Co., Main St., Winnipeg.	2 "	75	Ontario Cheese Manufacturer.	Unknown
" 6	" ...	79655	D. Jenner, 425 Martin Ave., Elunwood, Winnipeg.	2 "	70	.....	Jobin Marrin, Winnipeg.

CHEESE.

Inspector's Report. (Is not an expression of opinion).	Results of Analysis.						No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Water.	Fat.	Total Ash.	Salt in Ash.	Curd by dif- ference.	Fat on dry substance.		

Concluded.

	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.		
.....	38.20	34.10	3.48	0.91	24.22	55.17	65364	Genuine.
.....	35.92	34.60	3.61	0.98	25.84	53.93	65370	"
.....	34.64	34.35	3.60	1.02	27.41	54.06	65372	"

THOS. E. ARMSTRONG, INSPECTOR.

	31.76	34.60	3.20	0.82	30.44	50.71	78679	Genuine.
Mfd. in Woodstock.	36.28	35.20	3.20	1.05	25.32	55.32	78686	"
.....	33.34	34.50	2.60	0.94	29.56	51.75	78690	"
.....	30.61	36.10	3.80	0.96	20.46	52.04	78693	"
.....	29.24	34.10	3.34	0.82	33.32	48.17	78695	"
.....	32.06	35.30	2.76	0.54	29.88	51.91	78697	"
.....	33.50	35.75	2.96	0.64	27.79	53.73	79404	"
.....	35.92	35.30	2.66	0.82	26.12	55.08	79406	"
.....	33.24	37.40	3.24	0.70	26.12	56.02	79408	"

J. B. COSGROVE, INSPECTOR.

	34.16	36.6	2.96	1.07	26.28	55.59	79646	Genuine.
.....	34.16	36.0	3.20	0.95	26.64	54.68	79647	"
.....	33.84	34.2	3.32	1.00	28.64	51.60	79648	"
.....	35.28	35.1	3.36	1.21	26.26	54.24	79649	"
.....	32.64	34.2	3.56	1.24	29.00	50.77	79650	"
.....	34.76	36.0	2.84	0.83	26.40	55.18	79651	"
.....	38.80	36.1	4.00	1.88	23.10	57.33	79652	"
.....	34.28	34.5	3.44	1.25	27.78	52.49	79653	"
.....	31.76	36.0	3.76	1.48	28.48	53.74	79654	"
.....	32.04	35.0	3.80	1.39	29.16	51.50	79655	"

BULLETIN No. 398—

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.	
				Quantity.	Cents.	Manufacturer.	Furnisher.

DISTRICT OF SASKATCHEWAN—

1917							
Dec. 5	Cheese ..	76961	Beauregard & Co., Assiniboia.	2 lbs.	70	Unknown	
" 5	"	76963	Anderson & Thompson, Assiniboia.	2 "	65	Swift Can. Co., Winnipeg.	Manufacturers ..
" 5	"	76974	McBrides, Ltd., Assiniboia	2 "	70	Swift Can. Co., Winnipeg.	" ..
" 18	"	76986	Clay's Bakery & Grocery, Eyebrow.	2 "	75	.....	Swift Can. Co., Moosejaw.
" 19	"	76989	J. D. Munroe, Eyebrow	2 "	60	.....	Swift Can. Co., Moosejaw.
" 18	"	76993	S. Bookholter, Eyebrow	2 "	70	.....	McDonald Crawford Co., Moosejaw.
" 19	"	76995	R. Black, Tuxford	2 "	70	.....	Codville Co., Moosejaw.
" 19	"	76998	R. T. Lowther, Tuxford	2 "	70	.....	Cameron & Heap, Regina.
" 20	"	77004	The Paragon Store, Moosejaw.	2 "	60	.....	McDonald & Crawford Co., Moosejaw.
" 20	"	77005	The S. D. McMicken Co., Moosejaw.	2 "	70	.....	The Codville Co., Moosejaw.
Nov. 13	"	78585	H. B. Hall & Sons, Lloydminster.	2 "	70	.....	Burns & Co., Edmonton.
" 15	"	78589	Tarbel Bros., N. Battleford.	2 "	70	.....	P. Burns & Co., Saskatoon.
" 18	"	78592	Hub. Clothiers, N. Battleford.	2 "	55	.....	A. McDonald & Co. N. Battleford.
" 19	"	78595	J. A. Roy, Delmas	2 "	95	.....	Swift Can. Co., Edmonton.
" 20	"	78599	Jacob Goldstein, Radisson	2 "	60	.....	Campbell, Wilson & Miller, Saskatoon.
" 28	"	81809	Borden Trading Co., Borden.	2 "	65	.....	Swifts, Saskatoon.

DISTRICT OF ALBERTA—

Oct. 24	Cheese ..	52832	The John Irwin Co., Ltd., Calgary.	3 jars.	1.05	McLaren's Imperial Cheese Co., Toronto.	.....
" 24	"	52833	Wm. Quirk, Calgary	2 lbs.	50	.....	P. Burns & Co. Ltd.
" 25	"	52834	Jenkins & Co., East Calgary	2 "	90	McLaren's Imperial Cheese Co., Toronto.	.....
" 3	"	52835	H. Chornday, 502 4th St., E. Calgary.	2 "	65	.....	Simington & Co., Calgary.
" 10	"	52836	Excalibur Grocery, 462 8th Ave., E. Calgary.	2 "	80	Carlyle Dairy Co., Calgary.	.....
26	"	52837	Maitland & Co., 334 A 8th Ave., E. Calgary.	2 "	60	.....	Gordon, Ironside & Fares, Winnipeg.
" 29	"	52838	W. E. Lord Co., Red Deer	2 "	60	.....	Campbell, Wilson & Horne, Red Deer.

CHEESE.

Inspector's Report (is not an expression of opinion).	Results of Analysis.						No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Water.	Fat.	Total Ash.	Salt in ash.	Curd by difference.	Fat on dry substance.		
L. H. HALL AND J. M. DANIS, INSPECTORS.								

	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.		
.....	30.08	36.0	3.60	1.27	30.39	01.4c	76961	Genuine.
.....	33.12	34.5	3.48	1.23	29.90	51.58	76963	"
.....	31.68	34.5	3.48	1.39	30.34	50.49	76974	"
.....	34.08	34.5	3.92	1.39	27.50	52.33	76986	"
.....	34.76	35.1	3.52	1.43	27.62	53.80	76989	"
.....	33.60	36.0	3.44	1.37	26.96	54.21	76993	"
.....	31.20	36.0	3.68	1.20	29.12	52.32	76996	"
.....	32.04	35.4	3.60	0.94	28.96	52.08	76998	"
.....	26.80	36.0	3.36	1.20	33.84	49.18	77094	"
.....	27.28	36.0	3.36	0.79	33.36	49.54	77096	"
.....	33.84	36.6	3.60	1.30	25.96	55.33	78585	"
.....	33.64	37.5	3.60	1.62	25.26	56.20	78589	"
.....	28.08	38.0	3.16	1.14	30.76	52.84	78592	"
.....	32.36	35.1	3.76	1.35	28.78	51.89	78595	"
.....	33.32	36.0	3.40	1.11	27.28	53.99	78599	"
.....	35.24	33.0	3.60	1.25	25.16	50.95	81809	"

A. W. R. MARKLEY, INSPECTOR.

McLaren's Imperial.	29.6	37.5	4.16	1.74	28.74	53.26	52832	Genuine.
.....	30.4	36.0	3.20	1.76	30.76	51.72	52833	"
McLaren's Cream.	33.2	37.5	4.48	2.09	24.82	56.13	52834	"
.....	34.1	34.5	2.68	0.81	28.72	52.35	52835	"
.....	32.9	36.0	3.52	1.72	27.58	53.65	52836	"
Royal Oxford Brand.	32.4	37.5	3.12	1.09	26.98	55.47	52837	"
Ontario.	28.6	36.0	3.36	1.25	32.14	50.39	52838	"

BULLETIN No. 398—

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher, as given by the Vendor.	
				Quantity.	Cents.	Manufacturer.	Furnisher.
DISTRICT OF ALBERTA—							
Oct. 30	Cheese...	52839	A. M. Campbell, Lacombe.	2 lbs.	60	Dom. Exper. Farm, Lacombe.	
" 30	"	52840	Lawson & Co., Ltd., Wetaskiwin.	2 "	70		
" 30	"	52841	J. J. Christopher, Wetaskiwin.	2 "	70		Balfour, Syme & Co., Ltd., Hamilton.
DISTRICT OF ROCKY MOUNTAINS—							
Nov. 2	Cheese...	68523	Star Grocery, Nelson, B.C.	2 lbs.	70		Balfour, Syme & Co., Hamilton.
" 2	"	68527	Hudson's Bay Co., Nelson, B.C.	2 "	70	Calgary Central Creamery, Calgary.	
" 5	"	68532	R. A. Smith, Moyie, B.C.	2 "	70		Swift Can. Co., Edmonton.
" 5	"	68537	P. Conrad, Moyie, B.C.	2 "	70		" "
" 8	"	68540	R. Hirtz, Elko, B.C.	2 "	70		Gordon, Ironside & Fares, Moose Jaw.
" 8	"	68541	F. Roo, Elko, B.C.	2 "	75		W. C. Wholesale Co., Fernie.
" 15	"	68547	Crows Nest Trading Co., Fernie, B.C.	2 "	60		A. Macdonald & Co., Fernie, B.C.
" 15	"	68548	" "	2 "	1.00		Racker, Kingsman & Herrin Co., Spokane.
" 15	"	68552	Trites Wood Co., Fernie, B.C.	2 "	60	Hepworth & Trimble Creamery, Red Deer.	
" 15	"	68553	" "	2 "	1.10	J. S. Hoffman Co., Chicago.	
DISTRICT OF VANCOUVER—							
Nov. 16	Cheese	76226	Mitchell & Cahill, 2nd Ave. & Commercial Drive, Vancouver.	2 lbs.	70	Swift Can. Co., Ltd., Vancouver.	
" 16	"	76227	Swindell & Fowler, Ltd., 1417 Commercial Drive, Vancouver.	1½ "	40	W. A. B. Olds.	
" 19	"	76228	The Western Grocery, 2243 Main St., Vancouver.	2 "	70	Parsons Haddock Co., Ltd., Vanc.	
" 19	"	76229	C. H. Merritt, 2250 4th Ave., W. Vancouver.	2 "	60	Unknown.	
" 20	"	76230	Elliott & Co., 15th Ave. & Kingsway, Vancouver.	2 "	70	Leeson, Dickie & Gross, Vancouver.	
" 22	"	76231	Overwaitea Co., New Westminster.	1½ "	55	Unknown	
" 23	"	76232	Cow Butter Store, 195 Hastings St., E. Vancouver.	1½ "	40	F. R. Stewart & Co., Vancouver.	
" 27	"	76233	Slater's Market, 181 Hastings St., E. Vancouver.	2 "	50		P. Burns & Co., Vancouver.
" 27	"	76234	Woodward Dept. Stores, Hastings & Abbott Sts., Vancouver.	2 "	70		D. Nasmyth, Vancouver.
" 27	"	76235	P. Burns & Co., 16 Hastings St., W. Vancouver.	1½ "	35		Unknown.

CHEESE.

Inspector's Report. (Is not an expression of opinion).	Results of Analysis.						No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Water.	Fat.	Total Ash.	Salt in Ash.	Curd by Difference.	Fat on Dry Substance.		

Concluded.

Cheddar.....	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	52839	Genuine.
.....	30.1	34.5	3.32	1.32	32.08	49.34	52840	"
.....	26.0	37.5	3.88	1.27	32.32	50.67	52841	"

THOS. PARKER, INSPECTOR.

.....	28	32.84	3.08	0.38	31.20	48.94	68523	Genuine.
.....	32.21	34.68	3.16	0.43	29.95	51.16	68527	"
.....	35.96	33.02	3.38	0.64	27.64	51.56	68532	"
.....	30.94	31.04	4.08	0.85	33.94	44.95	68537	Slightly below standard. Pass.
.....	29.66	31.96	3.64	0.66	34.74	45.43	68540	Genuine.
.....	34.61	32.64	3.08	0.88	29.77	49.76	68541	"
.....	29.12	28.54	3.80	1.14	38.54	40.26	68547	Below standard. Adulterated.
Badger.....	31.93	32.06	5.30	1.75	30.71	47.10	68549	Genuine.
.....	32.98	30.00	3.48	0.55	33.54	44.76	68552	Slightly below standard. Pass.
Red Bar.....	42.33	27.70	3.56	1.15	26.41	48.04	68553	Genuine.

G. G. ARMYTAGE, INSPECTOR.

.....	36.26	32.70	3.60	0.86	27.44	51.30	76226	Genuine.
.....	36.42	33.42	3.46	0.30	26.70	52.57	76227	"
.....	34.02	32.12	3.58	0.74	30.28	48.68	76228	"
.....	36.24	32.48	3.78	1.07	27.50	50.94	76229	"
.....	36.83	31.62	3.64	0.87	27.91	50.06	76230	"
McLaren's Primrose.	35.97	32.14	3.70	0.93	28.19	50.19	76231	"
.....	28.68	31.66	3.78	0.82	35.88	44.39	76232	Slightly below standard. Pass.
.....	34.60	35.16	3.44	0.95	26.80	53.75	76233	Genuine.
Stilton.....	33.73	34.22	3.56	0.41	28.49	51.63	76234	"
Skim Milk.....	38.80	23.96	5.98	2.41	31.26	39.14	76235	Sold as skim milk cheese.